



C20-CM-IT-WD-AI-106

7026

BOARD DIPLOMA EXAMINATION, (C-20)

SEPTEMBER/OCTOBER—2021

DCM - FIRST YEAR EXAMINATION

PROGRAMMING IN C

Time : 3 hours]

[Total Marks : 80

PART—A

3×10=30

- Instructions :**
- (1) Answer **all** questions.
 - (2) Each question carries **three** marks.
 - (3) Answers should be brief and straight to the point and shall not exceed five simple sentences.

1. Write about type qualifiers.
2. List various types of C tokens.
3. Write the importance of C preprocessor directive #include.
4. List various character input functions with syntax.
5. Write the differences between break and continue statements.
6. Write the syntax of 'switch' statement and give an example.
7. Define string. How do you declare and initialize a string?
8. What is nested structure? Give an example.
9. Write about scope and lifetime of a variable.
10. How do you initialize a pointer? Explain with an example.

PART—B

- Instructions :** (1) Answer **all** questions by making use of internal choice.
(2) Each question carries **eight** marks.
(3) Answers should be comprehensive and criterion for valuation is the content but not the length of the answer.

11. (a) Define constant and variable. Explain the declaration and initialization of constants and variables with examples. 4+4

OR

- (b) Explain various generation of computers.

12. (a) Write about any four character handling functions and write a program to convert a lowercase character to uppercase and vice-versa. 4+4

OR

- (b) Explain all the arithmetic and relational operators supported by C-language with an example.

13. (a) List and explain the various loop statements of C with syntax and examples. 8

OR

- (b) Write a program to print the following pattern :

```
*****  
*****  
***  
**  
*
```

14. (a) Define Union. How to declare and access members of union? Explain with an example. 8

OR

- (b) Write a program to find the sum of all the elements of a matrix of order MXN.

15. (a) Explain call by reference parameter passing technique. Write a program to interchange two values using call by reference. 3+5

OR

- (b) Explain any four file handling functions.

PART—C

10×1=10

- Instruction :**
- (1) Answer the following question.
 - (2) It carries **ten** marks.
 - (3) Answer should be comprehensive and criterion for valuation is the content but not the length of the answer.

16. Write a C Program to delete duplicate elements from an array of integers.

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